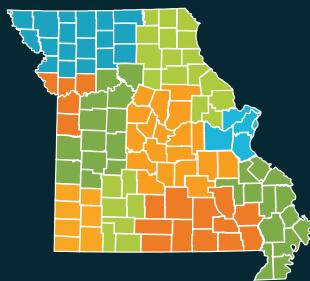


2022

CAREER GRADES REPORT



**DEPARTMENT OF
HIGHER EDUCATION &
WORKFORCE DEVELOPMENT**



INTRODUCTION

MISSOURI CAREER GRADES REPORT

**Career Grades
are based on a
combination of:**

- **Projected total job openings**
 - **Projected Percent Growth**
 - **Average Wage**
-

Now, Next, Later

**designations refer to the
amount of preparation
that is needed for entry
into an occupation.**

With nearly 800 occupations to consider, choosing a career can be challenging. Missouri Career Grades is a tool to help compare the future outlook of occupations in Missouri. To make the comparisons easier, letter grades, called Career Grades, are assigned to various occupations within the state based on each occupation's outlook over the next decade. Occupations in the Grade A category have the best outlook while Grade F occupations have the worst outlook. Grades are based on a combination of projected total job openings, projected percent growth, and the average wage of an occupation. Career Grades can assist students, job seekers, displaced workers, educators, and workforce professionals in choosing which careers have the best outlook in terms of growth, job openings, and average wages.

To assign a grade to an occupation, the occupation's projected performance is compared with the average for the state or region being analyzed. The degree to which an occupation is above or below the average for the three factors (total openings, percent growth, and average wage) is used to determine its grade. Occupations with a Career Grade of A+ or A have above average results in at least two of the three variables, and occupations receiving a grade of B+ or B have above average results in at least one of the three variables.

Career Grades are published for Missouri and the state's 10 regions, or Workforce Development Areas (WDAs). Grades assigned in each region are determined by comparing only the occupations within that region. Due to regional differences in economic makeup across the state, it is possible that an occupation can have a good outlook (and high grade) in one region, but have a poor outlook (and low grade) in another region.

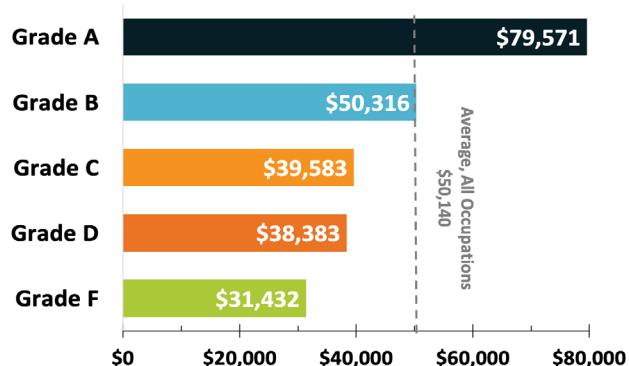
In addition to Career Grades, Now, Next, and Later designations can also be useful to job seekers, educators, and workforce professionals. These designations refer to the amount of preparation that is typically needed for entry into an occupation. Now occupations require the least amount of preparation and can be entered almost immediately while Later occupations require the most amount of preparation, with an education requirement of at least a bachelor's degree. Individuals starting their careers may want to look at which Now occupations offer career pathways to highly graded Next or Later occupations.

WHY DO CAREER GRADES MATTER?

HIGHER WAGES

While the 2020 average wage for all occupations in Missouri is \$50,140, some occupations earn substantially more or less than this amount. With average wages being one of the factors used to calculate Career Grades, higher graded occupations generally earn higher wages. Grade A occupations, on average, earn an annual 2020 wage of \$79,571. This is 58 percent higher than the average wage for all occupations. Grade B occupations earn an average annual wage of \$50,316, which is 27 percent higher than the average wage for Grade C occupations.

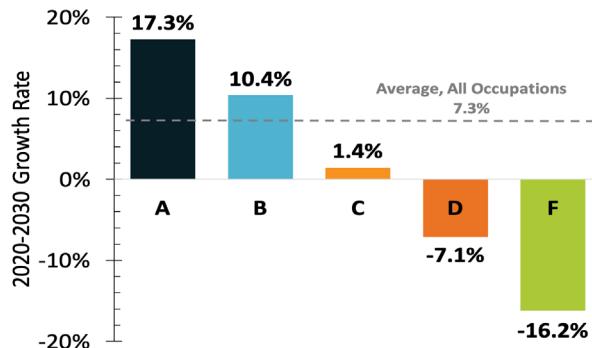
Average Wages by Career Grade



FASTER GROWTH RATES

The average growth rate across all occupations in Missouri is 7.3 percent. However, some occupations experience growth at a faster rate than others. Grade A occupations have a projected growth rate of 17.3 percent between 2020 and 2030 while Grade B and Grade C occupations are projected to grow at a rate of 10.4 and 1.4 percent, respectively. Grade D and F occupations are projected to have negative growth.

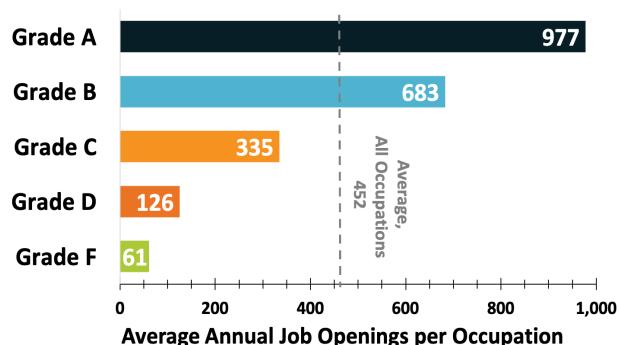
Growth Rates by Career Grades



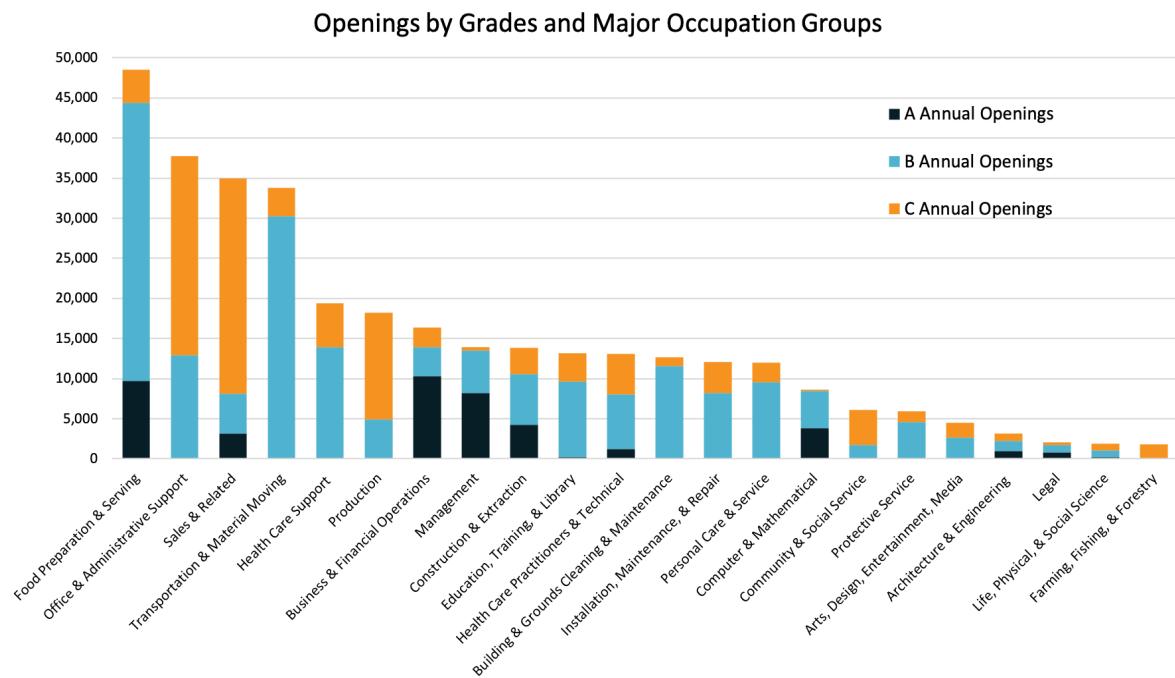
MORE JOB OPENINGS

Job openings occur when an occupation grows, when workers move from one occupation to another, or when workers leave the workforce. Grade A occupations are expected to have the most job openings per occupation between 2020 and 2030, with an average of 977 projected annual job openings for each of the 45 Grade A occupations. Average openings for each of the 264 Grade B occupations are projected at 683 annually. Grade A and B occupations are expected to have more annual job openings per occupation than the statewide average of 452.

Average Job Openings per Occupation by Career Grade



BY THE GRADE – JOB OPENINGS

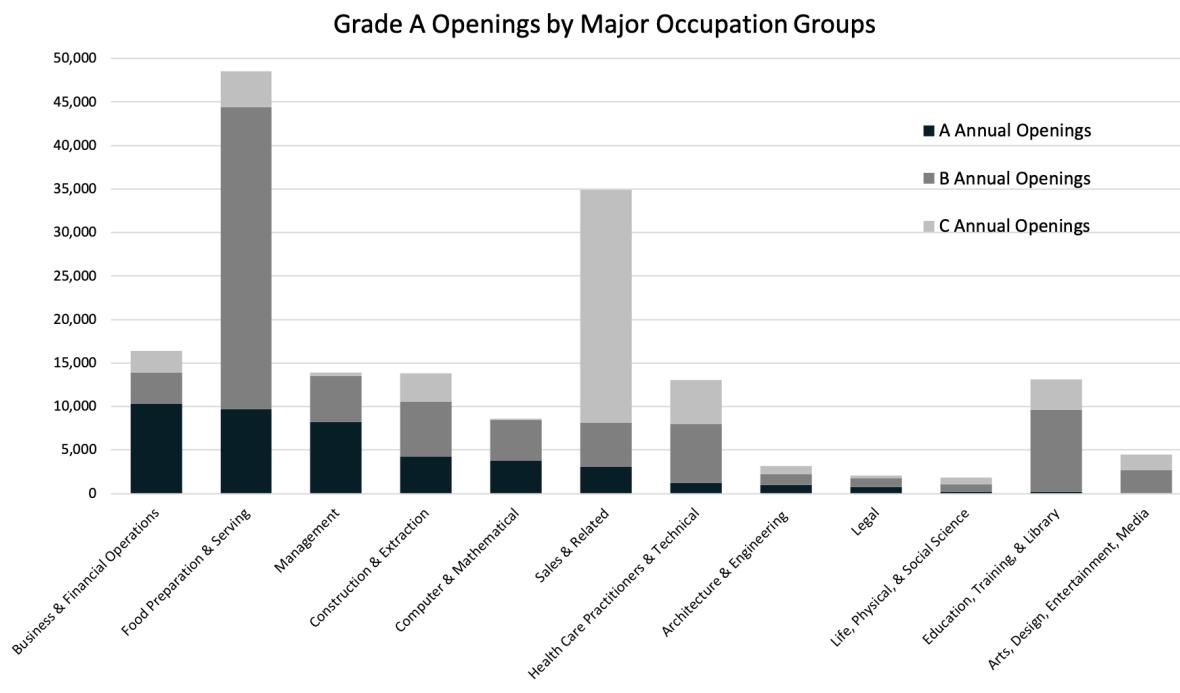


Grade A, B, and C occupations are projected to have over 333,700 job openings each year between 2020 and 2030, which represents 96 percent of total job openings. The *Food Preparation and Serving Related* major occupation group has the most job openings in Grade A, B, and C categories, with more than 48,500 annual openings through 2030. Of those 48,500 job openings, 91 percent are due to the need to replace workers who have left for another occupations or exited the workforce completely. In addition to having the most projected annual openings in A, B, and C occupations, the *Food Preparation and Serving Related* major occupation group is also projected to have a very high growth rate of almost 20 percent between 2020 and 2030. A large portion of this high growth rate could be attributed to recovery from the COVID-19 pandemic and shutdowns in 2020. The major occupation group of *Office and Administrative Support* is projected to have the next highest job openings in Grade B and C occupations with more than 37,700 openings, despite having a negative projected growth rate.

Major Occupation Groups with Most Grade A, B, and C Openings

Major Occupation Group	2020 Employment	2030 Employment	Net Change	Percent Growth	Annual Openings
Food Preparation & Serving Related	227,810	273,251	45,441	19.9%	48,504
Office & Administrative Support	350,746	347,890	-2,856	-0.8%	37,764
Sales & Related	266,728	267,018	290	0.1%	34,940
Transportation & Material Moving	236,805	263,674	26,869	11.3%	33,777
Health Care Support	139,214	155,917	16,703	12.0%	19,426
Production	155,867	164,222	8,355	5.4%	18,243
Business & Financial Operations	171,537	184,780	13,243	7.7%	16,373
Management	147,382	162,126	14,744	10.0%	13,908
Construction & Extraction	124,554	136,015	11,461	9.2%	13,821
Education, Training, & Library	137,564	148,399	10,835	7.9%	13,153

GRADE A OPENINGS



Sorted left to right in descending order by number of Grade A job openings

Grade A occupations are projected to have more than 42,600 annual job openings between 2020 and 2030. These openings are spread across 12 of the 22 major occupation groups. *Business and Financial Operations* are expected to have the most Grade A job openings with more than 10,200 annual openings projected through 2030.

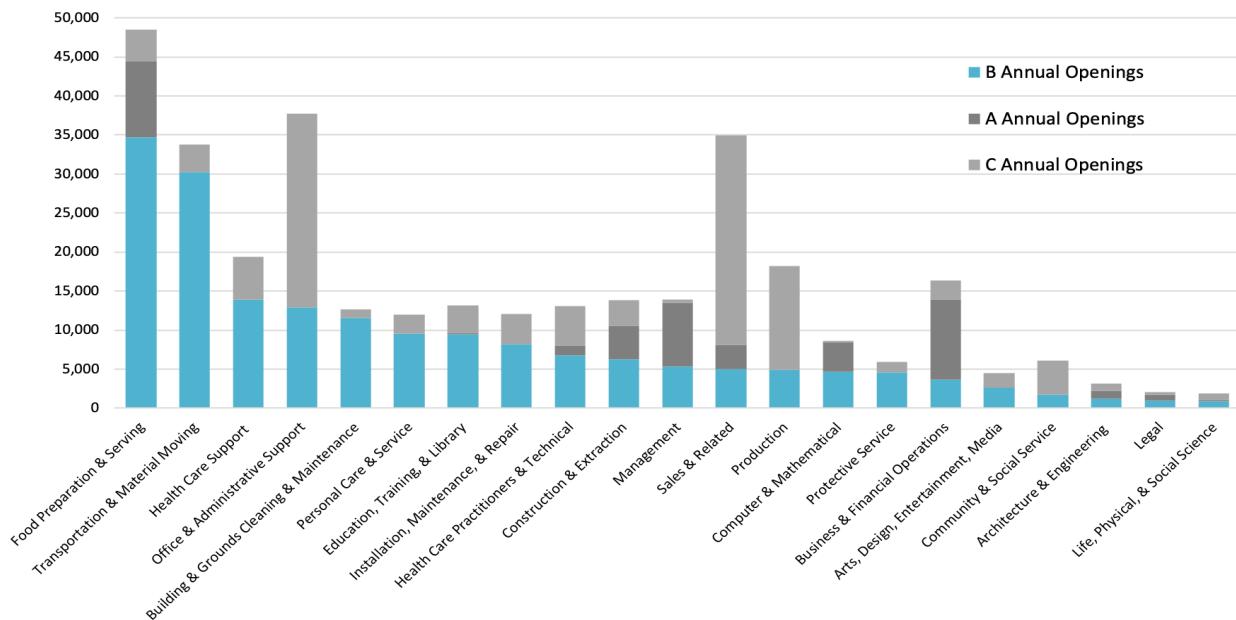
In addition to having a large number of job openings, Grade A *Food Preparation and Serving Related* occupations are also expected to have the fastest growth rate, at nearly 38 percent, between 2020 and 2030. Grade A occupations in *Health Care Practitioners and Technical* are projected to have the next fastest growth rate of 36 percent. The major occupation group of *Business and Financial Operations* has the highest concentration of Grade A jobs, with 62 percent of its projected openings coming from Grade A occupations.

Major Occupation Groups with Most Grade A Openings

Major Occupation Group	2020 Grade A Employment	2030 Grade A Employment	Grade A Net Change	Grade A Percent Growth	Grade A Annual Openings
Business & Financial Operations	102,581	113,386	10,805	10.5%	10,288
Food Preparation & Serving Related	46,041	63,445	17,404	37.8%	9,687
Management	83,916	95,127	11,211	13.4%	8,215
Construction & Extraction	35,291	40,274	4,983	14.1%	4,241
Computer & Mathematical	36,220	45,008	8,788	24.3%	3,791
Sales & Related	28,133	30,676	2,543	9.0%	3,110
Health Care Practitioners & Technical	12,402	16,863	4,461	36.0%	1,194
Architecture & Engineering	11,573	13,447	1,874	16.2%	1,003
Legal	12,886	14,290	1,404	10.9%	768
Life, Physical, & Social Science	1,817	2,287	470	25.9%	198

GRADE B OPENINGS

Grade B Openings by Major Occupation Groups



Sorted left to right in descending order by number of Grade B job openings

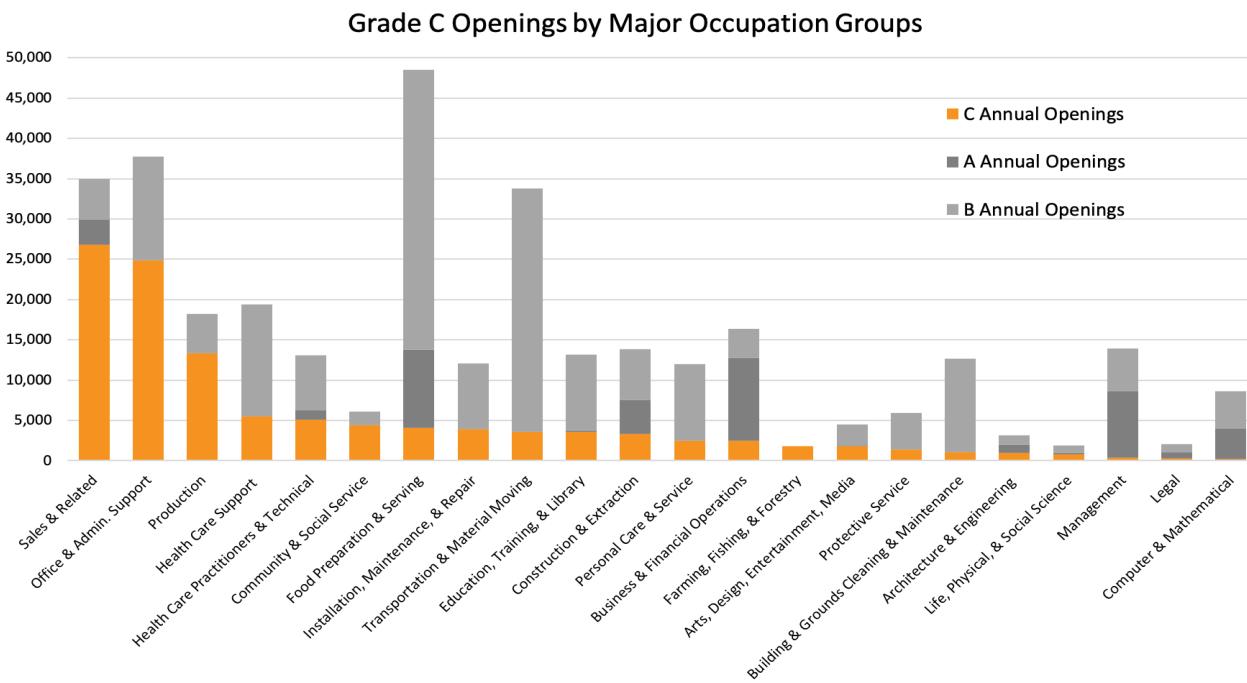
Grade B occupations are projected to have over 179,000 job openings each year between 2020 and 2030. This represents a majority of job openings across all occupations. *Food Preparation and Serving Related* occupations are expected to have the most Grade B openings, with more than 34,700 job openings projected each year through 2030.

The major occupation group of *Building and Grounds Cleaning and Maintenance* is projected to have 92 percent of its openings from 2020 to 2030 coming from Grade B occupations. The *Transportation and Material Moving* major occupation group is expected to have the second most Grade B jobs, with more than 30,200 projected annual job openings. Grade B occupations in *Food Preparation and Serving Related* and *Personal Care and Service* are projected to have high growth rates of 18 and 17 percent, respectively.

Major Occupation Groups with Most Grade B Openings

Major Occupation Group	2020 Grade B Employment	2030 Grade B Employment	Grade B Net Change	Grade B Percent Growth	Grade B Annual Openings
Food Preparation & Serving Related	153,839	181,562	27,723	18.0%	34,729
Transportation & Material Moving	211,664	236,735	25,071	11.8%	30,215
Health Care Support	97,322	111,656	14,334	14.7%	13,928
Office & Administrative Support	105,545	109,810	4,265	4.0%	12,931
Building & Grounds Cleaning & Maintenance	79,778	86,281	6,503	8.2%	11,571
Personal Care & Service	55,698	65,157	9,459	17.0%	9,511
Education, Training, & Library	99,905	108,170	8,265	8.3%	9,448
Installation, Maintenance, & Repair	77,755	84,320	6,565	8.4%	8,189
Health Care Practitioners & Technical	118,544	127,535	8,991	7.6%	6,799
Construction & Extraction	59,193	64,109	4,916	8.3%	6,299

GRADE C OPENINGS



Sorted left to right in descending order by number of Grade C job openings

Grade C occupations account for 32 percent of total openings between 2020 and 2030, with more than 112,000 job openings projected each year during that time frame. *Sales and Related* occupations are expected to have the most Grade C job openings with more than 26,800 projected openings each year through 2030. Grade C job openings account for 75 percent of projected total openings in *Sales and Related* occupations. The *Office and Administrative Support* major occupation group is expected to have the second most Grade C jobs, with more than 24,800 projected annual job openings.

Major Occupation Groups with Most Grade C Openings

Major Occupation Group	2020 Grade C Employment	2030 Grade C Employment	Grade C Net Change	Grade C Percent Growth	Grade C Annual Openings
Sales & Related	192,126	186,183	-5,943	-3.1%	26,834
Office & Administrative Support	245,201	238,080	-7,121	-2.9%	24,833
Production	114,500	118,575	4,075	3.6%	13,364
Health Care Support	41,892	44,261	2,369	5.7%	5,498
Health Care Practitioners & Technical	65,416	69,135	3,719	5.7%	5,051
Community & Social Service	40,541	42,792	2,251	5.6%	4,410
Food Preparation & Serving Related	27,930	28,244	314	1.1%	4,088
Installation, Maintenance, & Repair	36,273	38,169	1,896	5.2%	3,895
Transportation & Material Moving	25,141	26,939	1,798	7.2%	3,562
Education, Training, & Library	36,315	38,563	2,248	6.2%	3,536

By the Grade – Top Jobs

Grade A Occupations

Prep Needed	Title	Annual Openings	2020-2030 Growth Rate	Average Wages
NEXT	Cooks, Restaurant 🔥	6,497	48.1%	\$27,250
LATER	General & Operations Managers 🔥	5,593	10.4%	\$101,610
NEXT	First-Line Supervisors of Food Preparation & Serving Workers 🔥	3,190	20.9%	\$36,410
LATER	Software Developers & Software QA Analysts & Testers 🔥	3,122	23.0%	\$96,530
LATER	Accountants & Auditors 🔥	2,848	6.3%	\$71,130
NOW	Construction Laborers	2,601	12.6%	\$51,200
NEXT	Sales Representatives, Wholesale & Manufacturing 🔥	2,423	8.6%	\$71,670
LATER	Proj. Management Specialists & Business Operations Specialists	2,180	5.5%	\$80,400
LATER	Management Analysts 🔥	1,645	13.4%	\$88,950
NEXT	Electricians	1,640	16.8%	\$61,490

Grade B Occupations

Prep Needed	Title	Annual Openings	2020-2030 Growth Rate	Average Wages
NOW	Fast Food & Counter Workers 🔥	14,092	15.4%	\$24,580
NOW	Home Health & Personal Care Aides 🔥	10,800	13.4%	\$25,840
NOW	Waiters & Waitresses	10,041	19.4%	\$23,880
NOW	Stockers & Order Fillers	7,930	8.2%	\$30,120
NOW	Customer Service Representatives 🔥	6,825	1.0%	\$36,580
NOW	Laborers & Freight, Stock, & Material Movers 🔥	6,808	13.0%	\$33,360
NOW	Janitors & Cleaners 🔥	5,721	6.5%	\$29,550
NEXT	Heavy & Tractor-Trailer Truck Drivers 🔥	5,662	9.2%	\$48,230
LATER	Registered Nurses 🔥	4,405	6.5%	\$65,900
NOW	Childcare Workers	3,222	9.3%	\$25,150

Grade C Occupations

Prep Needed	Title	Annual Openings	2020-2030 Growth Rate	Average Wages
NOW	Cashiers 🔥	11,504	-7.8%	\$24,490
NOW	Retail Salespersons 🔥	10,597	0.7%	\$30,640
NOW	Office Clerks, General	7,184	-1.3%	\$36,060
NEXT	Nursing Assistants 🔥	4,454	4.0%	\$27,720
NOW	Secretaries & Administrative Assistants 🔥	4,243	-8.1%	\$37,310
NEXT	Miscellaneous Assemblers & Fabricators	3,038	0.3%	\$39,360
NEXT	Bookkeeping, Accounting, & Auditing Clerks 🔥	2,891	-1.9%	\$41,320
NEXT	First-Line Supervisors of Retail Sales Workers 🔥	2,397	-5.9%	\$43,960
NOW	Shipping, Receiving, & Traffic Clerks	2,093	-2.4%	\$34,150
NOW	Cooks, Institution & Cafeteria	2,014	3.0%	\$26,430



BY THE GRADE – EDUCATION/SKILL LEVEL

Occupations can be further divided into Now, Next, and Later categories, based on the preparation often required to enter into an occupation. Now occupations offer the most immediate employment opportunities and can generally be entered into with little to no preparation. Next occupations require further preparation, such as an associate degree, apprenticeship or moderate training, and Later occupations require the most preparation, with a minimum requirement of a bachelor's degree for entry.

NOW OCCUPATIONS

Typically requires short-term on-the-job training, little to no experience, and/or a high school diploma

NEXT OCCUPATIONS

Typically requires non-degree certificate, associate degree, apprenticeship, some experience, or moderate- to long-term training

LATER OCCUPATIONS

Typically requires a bachelor's degree or higher

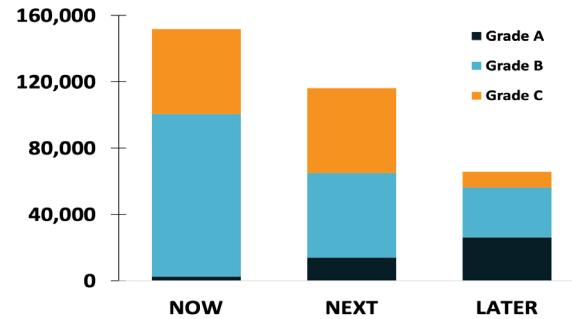
JOB OPENINGS BY GRADE & SKILL LEVEL

In general, lower skill or entry-level jobs have more job openings. Now occupations have the most projected job openings with more than 157,000 openings per year between 2020 and 2030.

Later occupations have 39 percent of total openings coming from Grade A occupations. Now (2%) and Next (11%) occupations have a smaller share of Grade A openings.

Grade B openings account for 62 percent of Now, 41 percent of Next, and 45 percent of Later total openings.

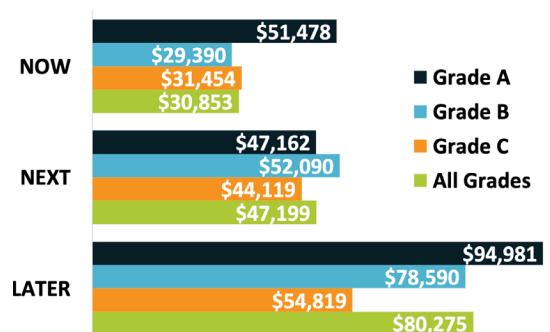
2020-2030 Annual Job Openings by Grades and Skill Level



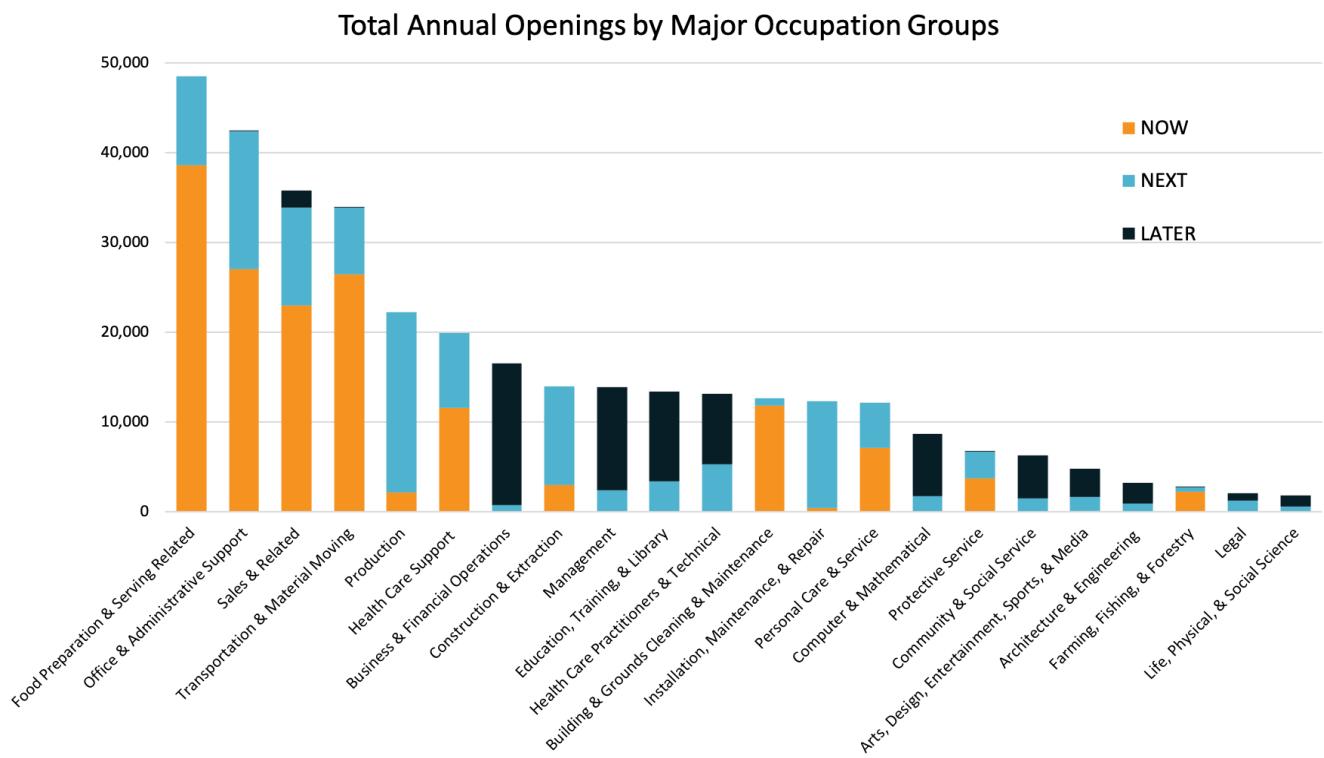
AVERAGE WAGE BY GRADE & SKILL LEVEL

Later occupations earn an average 2020 wage of \$80,275, which is 70 percent higher than the average wage for Next occupations, at \$47,199. At each skill level, higher-graded occupations usually earned higher wages. Grade A Later occupations, as a group, earned the highest average 2020 wage at \$94,981.

Average Wage by Skill Level and Grade



JOB OPENINGS BY NOW, NEXT, LATER



Every occupation can be grouped into one of 22 major occupation groups. There can be considerable differences among the major occupation groups in terms of the projected number of annual job openings between 2020 and 2030. The *Food Preparation and Serving Related* occupation group is expected to have the most job openings, with more than 48,500 annual openings through 2030.

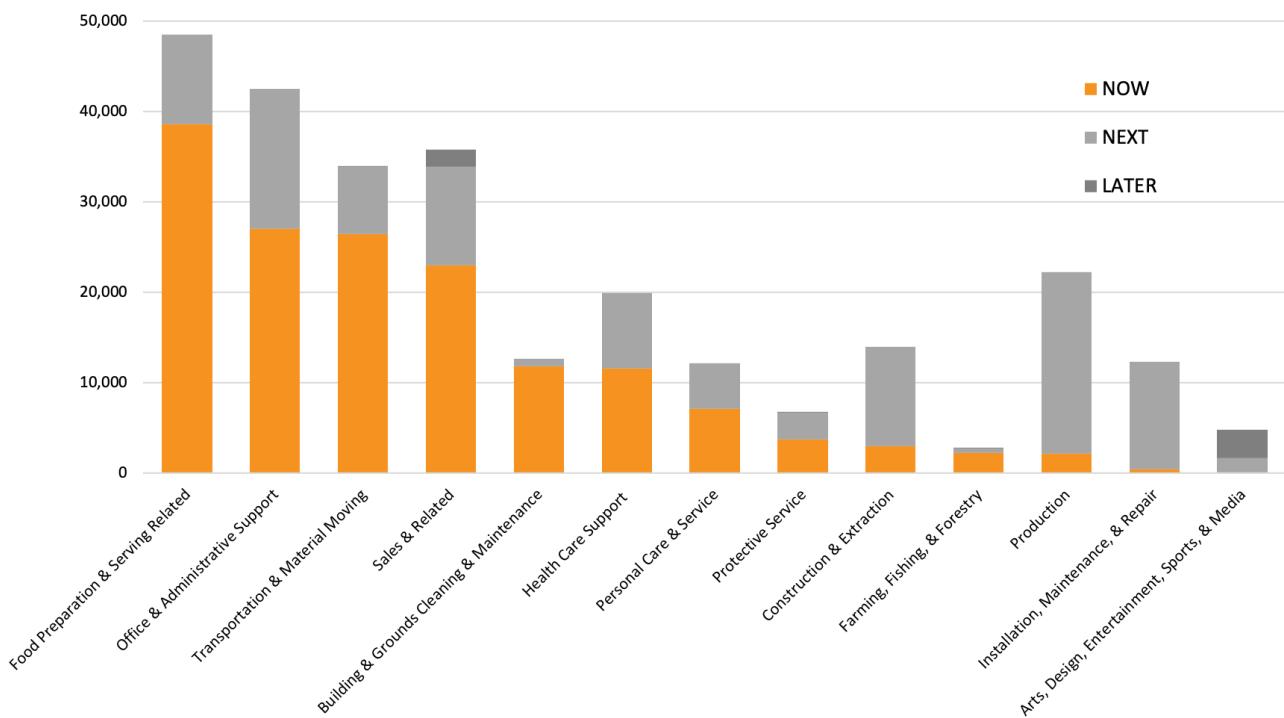
The occupation groups of *Office and Administration Support* and *Sales and Related* are projected to have the second and third most openings with 42,400 and 35,700 annual projected openings, respectively, between 2020 and 2030. The *Food Preparation and Serving Related* major occupation group is expected to experience a high growth rate of nearly 20 percent between 2020 and 2030.

Top Major Occupation Groups by Job Openings

Major Occupation Group	2020 Employment	2030 Employment	Net Change	Percent Growth	Annual Openings
Food Preparation & Serving Related	227,810	273,251	45,441	19.9%	48,504
Office & Administrative Support	404,845	395,528	-9,317	-2.3%	42,487
Sales & Related	273,822	273,280	-542	-0.2%	35,764
Transportation & Material Moving	238,009	264,884	26,875	11.3%	33,941
Production	195,767	201,584	5,817	3.0%	22,214
Health Care Support	143,323	159,896	16,573	11.6%	19,920
Business & Financial Operations	173,779	186,834	13,055	7.5%	16,534
Construction & Extraction	126,591	137,940	11,349	9.0%	13,984
Management	147,382	162,126	14,744	10.0%	13,908
Education, Training, & Library	139,568	150,341	10,773	7.7%	13,385

NOW OPENINGS

NOW Openings by Major Occupation Groups



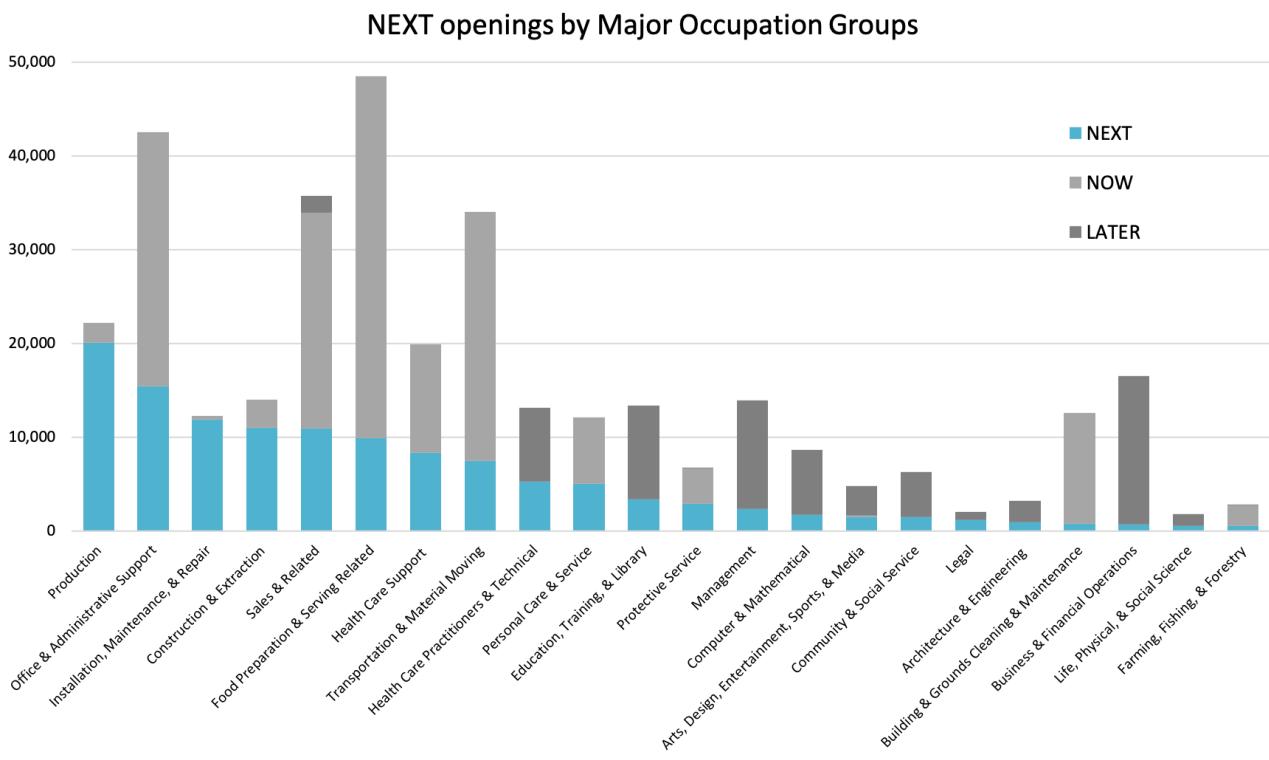
Sorted left to right in descending order by number of NOW job openings

Now occupations are projected to have more than 157,100 annual job openings between 2020 and 2030, representing 45 percent of total openings during that time frame. *Food Preparation and Serving Related* occupations are projected to have the most job openings in Now occupations, with more than 38,600 openings projected each year through 2030. In addition to having a large number of job openings, the *Food Preparation and Serving Related* major occupation group is also expected to have a high growth rate of 15.4 percent in Now occupations. *The Building and Grounds Cleaning and Maintenance* major occupation group has 94 percent of its openings coming from Now occupations. *Personal Care and Service* occupations are projected to have a high growth rate of 17.3 percent.

Major Occupation Groups with Most NOW Job Openings

Major Occupation Group	2020 NOW Employment	2030 NOW Employment	NOW Net Change	NOW Percent Growth	NOW Annual Openings
Food Preparation & Serving Related	180,514	208,251	27,737	15.4%	38,607
Office & Administrative Support	249,479	243,146	-6,333	-2.5%	27,036
Transportation & Material Moving	175,924	197,345	21,421	12.2%	26,442
Sales & Related	152,810	147,113	-5,697	-3.7%	23,022
Building & Grounds Cleaning & Maintenance	81,583	88,211	6,628	8.1%	11,823
Health Care Support	80,921	91,468	10,547	13.0%	11,532
Personal Care & Service	38,160	44,766	6,606	17.3%	7,115
Protective Service	20,989	23,598	2,609	12.4%	3,739
Construction & Extraction	26,194	29,082	2,888	11.0%	2,978
Farming, Fishing, & Forestry	13,910	14,077	167	1.2%	2,201

NEXT OPENINGS



Sorted left to right in descending order by number of NEXT job openings

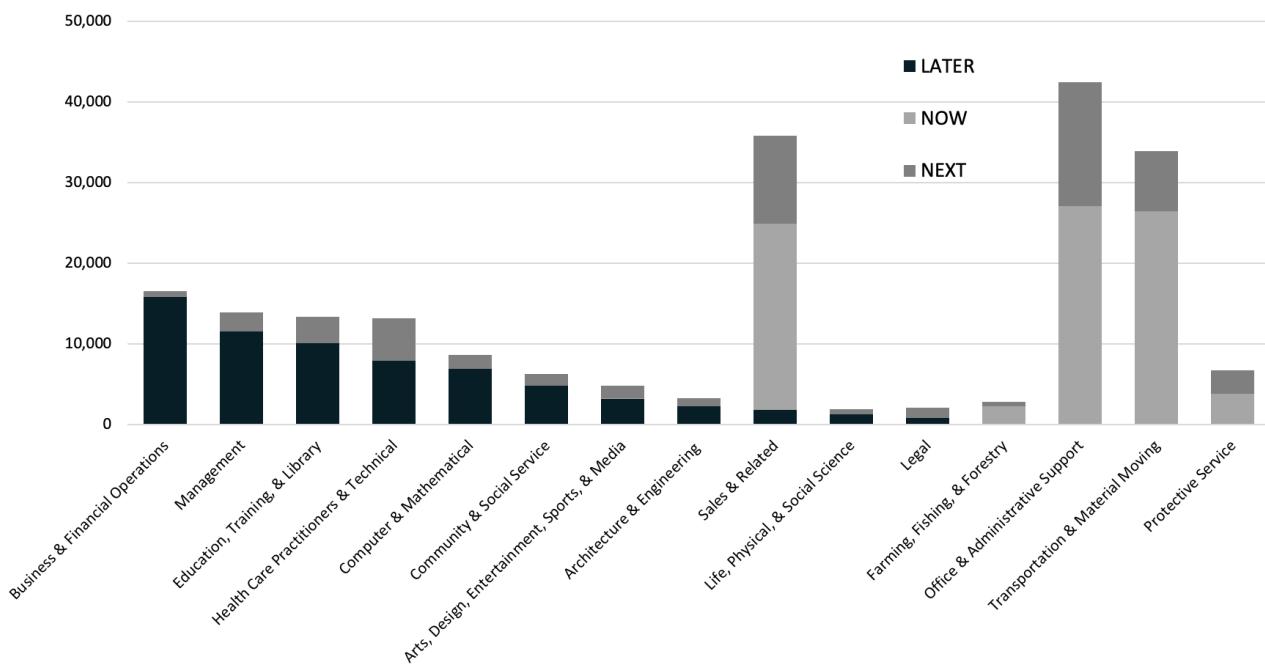
Next occupations are projected to have over 123,500 annual job openings spread across all 22 major occupation groups. The *Production* major occupation group is expected to have the most Next job openings with over 20,000 projected annual openings through 2030. *Office and Administrative Support* Next occupations are projected to have over 15,400 annual job openings, despite an overall negative growth rate between 2020 and 2030. Next occupations are heavily concentrated in the *Installation, Maintenance, and Repair* major occupation group, with 97 percent of the projected openings coming from Next openings. *Food Preparation and Serving Related* Next occupations are projected to have a high growth rate of 37.4 percent.

Major Occupation Groups with Most NEXT Job Openings

Major Occupation Group	2020 NEXT Employment	2030 NEXT Employment	NEXT Net Change	NEXT Percent Growth	NEXT Annual Openings
Production	179,081	184,554	5,473	3.1%	20,080
Office & Administrative Support	154,984	151,982	-3,002	-1.9%	15,401
Installation, Maintenance, & Repair	113,255	121,428	8,173	7.2%	11,923
Construction & Extraction	100,397	108,858	8,461	8.4%	11,006
Sales & Related	102,990	106,792	3,802	3.7%	10,916
Food Preparation & Serving Related	47,296	65,000	17,704	37.4%	9,897
Health Care Support	62,402	68,428	6,026	9.7%	8,388
Transportation & Material Moving	61,866	67,311	5,445	8.8%	7,474
Health Care Practitioners & Technical	66,604	71,562	4,958	7.4%	5,253
Personal Care & Service	33,468	38,234	4,766	14.2%	5,054

LATER OPENINGS

LATER Openings by Major Occupation Groups



Sorted left to right in descending order by number of LATER job openings

Later occupations are projected to have more than 66,400 annual job openings. *Business and Financial Operations* occupations are projected to have over 15,800 Later job openings each year through 2030, accounting for 96 percent of its total openings.

Eight of the top 10 major occupation groups with the most Later job openings are expected to have above average growth rates. The *Computer and Mathematical* major occupation group is projected to have a high growth rate of 14.8 percent through 2030.

Major Occupation Groups with Most LATER Job Openings

Major Occupation Group	2020 LATER Employment	2030 LATER Employment	LATER Net Change	LATER Percent Growth	LATER Annual Openings
Business & Financial Operations	164,915	178,041	13,126	8.0%	15,826
Management	122,664	136,649	13,985	11.4%	11,537
Education, Training, & Library	109,933	117,634	7,701	7.0%	10,028
Health Care Practitioners & Technical	131,277	143,513	12,236	9.3%	7,905
Computer & Mathematical	76,857	88,269	11,412	14.8%	6,910
Community & Social Service	46,473	49,395	2,922	6.3%	4,794
Arts, Design, Entertainment, Sports, & Media	28,131	30,558	2,427	8.6%	3,136
Architecture & Engineering	28,198	31,429	3,231	11.5%	2,258
Sales & Related	18,022	19,375	1,353	7.5%	1,826
Life, Physical, & Social Science	13,016	14,415	1,399	10.7%	1,280

Top Job Outlook

NOW Occupations

Typically require short-term on-the-job training, little to no experience, and/or a high school diploma

Grade	Title	Annual Openings	2020-2030 Growth Rate	Average Wages
B+	Fast Food & Counter Workers 🔥	14,092	15.4%	\$24,580
B	Home Health & Personal Care Aides 🔥	10,800	13.4%	\$25,840
B+	Waiters & Waitresses	10,041	19.4%	\$23,880
B	Stockers & Order Fillers 🔥	7,930	8.2%	\$30,120
B	Customer Service Representatives 🔥	6,825	1.0%	\$36,580
B+	Laborers & Freight, Stock, & Material Movers, Hand 🔥	6,808	13.0%	\$33,360
B	Janitors & Cleaners, Except Maids & Housekeeping Cleaners 🔥	5,721	6.5%	\$29,550
B	Childcare Workers	3,222	9.3%	\$25,150
B	Maids & Housekeeping Cleaners 🔥	3,025	11.1%	\$24,260
B	Landscaping & Groundskeeping Workers	2,825	8.6%	\$34,250

NEXT Occupations

Typically require non-degree certificate, associate degree, apprenticeship, some experience, or moderate- to long-term training

Grade	Title	Annual Openings	2020-2030 Growth Rate	Average Wages
A	Cooks, Restaurant	6,497	48.1%	\$27,250
B+	Heavy & Tractor-Trailer Truck Drivers 🔥	5,662	9.2%	\$48,230
B	Maintenance & Repair Workers, General 🔥	3,216	7.5%	\$41,940
A	First-Line Supervisors of Food Preparation & Serving Workers	3,190	20.9%	\$36,410
A	Sales Representatives, Wholesale & Manufacturing 🔥	2,423	8.6%	\$71,670
B	First-Line Supervisors of Office & Admin. Support Workers	2,274	-1.2%	\$62,020
B+	Carpenters	2,043	5.3%	\$60,100
B	Medical Secretaries	1,956	10.9%	\$36,610
B+	Sales Representatives of Services	1,883	9.3%	\$64,240
B	Automotive Service Technicians & Mechanics	1,699	1.0%	\$44,010

LATER Occupations

Typically require a bachelor's degree or higher

Grade	Title	Annual Openings	2020-2030 Growth Rate	Average Wages
A+	General & Operations Managers 🔥	5,593	10.4%	\$101,610
B+	Registered Nurses 🔥	4,405	6.5%	\$65,900
A+	Software Develop. & Quality Assurance Analysts & Testers 🔥	3,122	23.0%	\$96,530
A	Accountants & Auditors 🔥	2,848	6.3%	\$71,130
B	Secondary School Teachers, Ex. Special & Career/ Tech. Edu.	2,223	5.8%	\$48,570
A	Proj. Management & Business Operations Specialists, All Other	2,180	5.6%	\$80,400
A+	Management Analysts 🔥	1,645	13.4%	\$88,950
A	Human Resources Specialists 🔥	1,569	11.1%	\$61,150
B	Elementary School Teachers, Except Special Education	1,563	5.7%	\$52,050
A	Market Research Analysts & Marketing Specialists	1,481	22.8%	\$66,020



Flame icon indicates occupations with high numbers of online job postings in 2021.

METHODOLOGY

Grading Scale

Total	Grade
25-30	A+
22-24	A
20-21	B+
17-19	B
15-16	C+
12-14	C
9-11	D
3-8	F

Career Grades

Missouri's Career Grades are determined by using three statistical variables for each occupation; Projected Percentage of Growth, Projected Total Openings, and Average Wage.

The Projected Percentage of Growth is determined by dividing the projected numeric growth of an occupation by its base-year employment. Projected Total Openings are the sum of an occupation's projected growth, exit, and transfer openings. An occupation's average wage is determined by using data from the Occupational Employment and Wage Statistics (OEWS) program.

Each variable's normal distribution, formatted as a percentage, is determined for each occupation. Each variable's percentage is then converted into a number, with a "1" corresponding to a percentage of 0 percent to 9.9 percent, and a "2" corresponding to a percentage of 10 percent to 19.9 percent, for example. Each occupation's three variable number values are then added together, creating a range from 3 to 30.

Grades are then assigned to each occupation based on this total, using the above Grading Scale.

Grades for the state and each Workforce Development Areas (WDA) are calculated independently, comparing each occupation only to other occupations within the same WDA.

Skill Level

MERIC combines the definitions used by two reliable data sources to classify Now, Next, and Later occupations: The U.S. Bureau of Labor Statistics (BLS) typical job requirements and O*NET Job Zones. The BLS classifies jobs by the education or work experience required to enter an occupation, and the typical on-the-job training required to attain competency in the skills required in the job. O*NET Job Zones indicate the level of vocational preparation needed for an occupation with a range from 1 (little or no preparation) to 5 (extensive preparation).

Now – Has BLS typical job requirements of high school or less, no experience, short-term or less job training, and a Job Zone of 2 or less. A Job Zone of 2 indicates that an occupation needs some preparation.

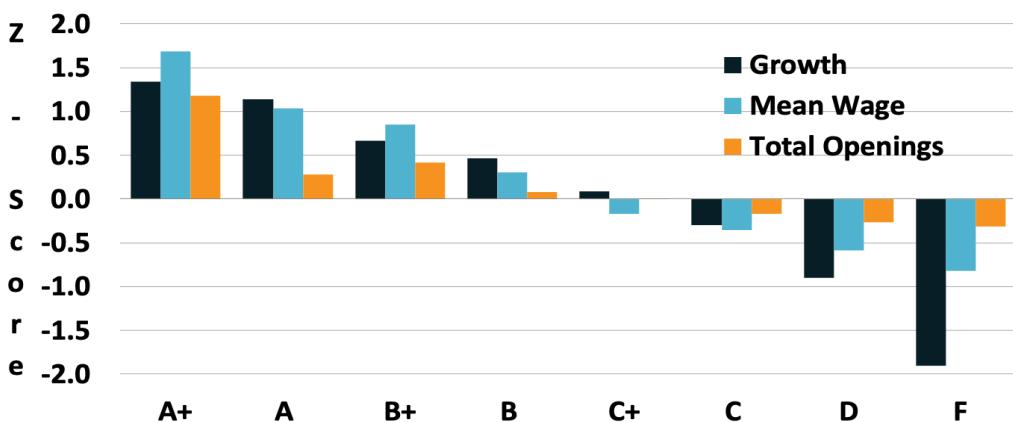
Next – Includes all remaining occupations after Now and Later occupations have been classified. Most Next occupations require on-the-job training of a year or more, including apprenticeships, and have Job Zones of 2 or 3. A Job Zone of 3 indicates that an occupation needs medium preparation. Next occupations at the higher end of the category require postsecondary education, such as an associate degree and/or some work experience in a related occupation.

Later – Requires a bachelor's degree or higher.

Variable Grade Distribution

The three variables for each occupation have a corresponding Z-Score, which represents that occupation's relationship to the group. A Z-Score of zero is equal to the group's average value. The following graph shows the variable Z-Scores by occupational grade.

Variable Z-Score by Grade



	A+	A	B+	B	C+	C	D	F
Growth	1.34	1.14	0.67	0.47	0.09	-0.30	-0.90	-1.90
Mean Wage	1.68	1.04	0.85	0.31	-0.17	-0.35	-0.59	-0.82
Total Openings	1.18	0.28	0.42	0.08	0.00	-0.17	-0.26	-0.32

Data Sources:

- Missouri Economic Research and Information Center (MERIC), Long-Term 2020-2030 Occupational Projections available at <https://meric.mo.gov/workforce-research/occupational-projections>
- U.S. Bureau of Labor Statistics Occupational Employment and Wage Statistics (OEWS), 2020 wage estimates
- U.S. Bureau of Labor Statistics, typical education and training requirement categories
- LightCast™, for online job postings data
- Grade A, B, and C and Now, Next, Later total openings data is based on publishable data. A portion of the 2020-30 growth is attributable to recovery from the 2020 COVID-19 pandemic. For more information, please review the 2020-2030 Growth and Recovery summary at <https://meric.mo.gov/media/pdf/missouri-2020-2030-projected-growth-and-recovery>

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